

# From neurons to neighbourhoods: The science of early childhood development <sup>[1]</sup>

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## AVAILABILITY

Access online [limited access] <sup>[2]</sup>

## Excerpt

On October 3, 2000, the National Research Council and Institute of Medicine of the National Academies released "From neurons to neighborhoods: The science of early childhood development." This report is the product of a two-and-a-half year effort by the Committee on Integrating the Science of Early Childhood Development, a group of 17 individuals with backgrounds in neuroscience, psychology, child development, economics, education, pediatrics, psychiatry, and public policy, and by the project's Study Director and staff.

The Committee's charge was to review what is known about the nature of early development and the influence of early experiences on children's health and well-being, to disentangle established knowledge from erroneous popular beliefs or misunderstandings, and to examine the implications of the science base for policy, practice, professional development, and research.

While "From neurons to neighborhoods" does its best to embrace the complexity of the science of early childhood development, a number of clear themes, all heavily grounded in and strongly supported by science, emerged from the Committee's inquiry. These include the following conclusions:

- The traditional "nature versus nurture" debate is simplistic and scientifically obsolete.
- Early experiences clearly influence brain development, but a disproportionate focus on "birth to three" begins too late and ends too soon.
- Early intervention programs can improve the odds for vulnerable young children, but those that work are rarely simple, inexpensive, or easy to implement.
- How young children feel is as important as how they think, particularly with regard to school readiness.
- Healthy early development depends on nurturing and dependable relationships.
- Culture influences all aspects of early development through child-rearing beliefs and practices.
- There is little scientific evidence that special "stimulation" activities above and beyond normal growth-promoting experiences lead to "advanced" brain development in infancy.

As a public issue, questions about the care and protection of children confront many of the basic values that have defined the United States from the time of its founding – personal responsibility, individual self-reliance, privacy, and limited government involvement in the lives of its citizens. In a highly pluralistic society that is experiencing dramatic economic and social change, however, the development of all children must be viewed as a matter of intense concern for both their parents and for the nation as a whole. Thus, based on the evidence gleaned from a rich and rapidly growing science base, the Committee felt an urgent need to call for a new national dialogue focused on rethinking the meaning of both individual and shared responsibility for children, as well as underscoring the importance of strategic investment in their future.

**Related link:** [From neurons to neighbourhoods: The science of early childhood development](#) <sup>[3]</sup>

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